

## A NEW LIZARD OF THE GENUS UTA FROM ARIZONA.

BY M. B. MITTLEMAN ${ }^{1}$

Despite a comparatively large range, Uta ornata linearis is remarkably constant in all of its diagnostically important features. Occasionally, local varieties are encountered which appear distinct enough to warrant some sort of formal designation. In every case, however, a careful study of these indicates that the supposed race or species falls entirely within the range of variation of $U$. o. linearis, and is not satisfactorily separable from this latter subspecies. Nonetheless, a series of specimens from a comparatively isolated portion of the range of linearis has come to my attention; these constantly exhibit several traits which are not in keeping with those of linearis as they occur elsewhere in the range of this race. Since the distinctive morphological constancy is correlated with a definite geographic distribution, a subspecific designation is warranted, and the race may be called:

Uta ornata chiricahuae, subsp. nov.
Type.-Museum of Vertebrate Zoology No. 7751, male; collected in Pinery Canyon, Chiricahua Mountains, $6,000 \mathrm{ft}$., Cochise County, Arizona, by J. E. Law, May 10, 1919.

Paratypes.-Thirty-six, as follows: M.V.Z. Nos. 7747-50; 7752-78; 8190; same data as type. M.V.Z. Nos. 13837-40, Dos Cabezos Mountains, Cochise County, Arizona.

Diagnosis.-Resembling Uta ornata lincaris superficially, but differing in the greater size of the enlarged dorsal scales; the extension of the vertebral series of enlarged seales onto the basal portion of the tail for a greater distance; greater proportionate width of the head; and a different arrangement of colors and pattern.

[^0]Description of type.-Two, occasionally three, rows of enlarged, keeled, imbricate, irregularly arranged vertebral scales, extending from a point a trifle craniad of the insertions of the fore limbs posteriorly onto the basal portion of the tail for a distance equal to half the length of the femur; vertebral scales bordered on either side by two series of regularly arranged, imbricate, and prominently keeled scales which are larger than the vertebrals, equal in size to the enlarged femoral scales, and larger than the enlarged tibial scales; scales of the inner series of enlarged dorsals not much larger in size than those of the outer series, or else scales of both series approximately equal in size; other dorsal scales very small, granular, or flattened, lightly keeled and barely imbricate; on the dorsolateral line a series of enlarged scales which extends from a point just anterior to the axilla, posteriorly to a point just caudad of the groin; dorsolateral enlarged scales tubercular, and disposed around other larger, spinose, strongly carinated scales to form small clusters; distinct dorsolateral and lateral folds present; lateral areas with prominent series of enlarged tubercles diagonally dispersed; two short, prominent cervical series of tubercles, and below these, a lateral series of the same and a ventrolateral series; lateral cervical tubercles merging with the series of enlarged tubercles of the dorsolateral line; posterior surfaces of thighs and arms covered with small granules, while the superior and anterior surfaces are covered with large, keeled, mucronate, imbricate scales; ventrals smooth, submucronate, about equal in size to the scales posteriorly bordering the gular fold; eleven of the largest dorsal scales equal to the length of the head from snout to posterior border of occipitals; frontal transversely divided; femoral pores 12-12; postanal plates conspicuously enlarged; a post-femoral dermal pocket present. Coloration (alcoholir): Head light brown dorsally, with fine spots and streaks of a darker brown; dorsum of body, limbs, and tail varying from dark brown to a blue-gray, faintly splotched with light blue; the five irregular cross bands which extend transversely from the lateral fold to the enlarged dorsals and break on the median line of the back, dark brown edged with light blue; limbs with bars of brown irregularly edged with light blue; venter of limbs with a suffused blue-gray; chin, from anterior gular fold up to but not including the sublabials, a bright sky blue; two large, brilliant, light blue abdominal patches which are fused medially, and sprinkled with dark gray laterally; interhumeral and interfemoral areas uniformly shaded with dark gray, and a few flecks of blackish; preanal region with a light blue wash. Measurements of type: Snout to posterior edge of ear, 12 mm .; head width, 11.5 mm .; snout to anus, 51 mm. ; hind leg (insertion to tip of 4th toe, exclusive of nail), 33.5 mm .; tail (tip partially regenerated), 70 mm . Measurements of entire type series (thirty-seven adults, both sexes): Snout to posterior edge of ear, 11.32 mm .; head width, 9.16 mm .; snout to anus, 47.70 mm .; hind leg (insertion to tip of 4th toe, exclusive of nail), 30.80 mm . (these figures represent the weighted arithmetic means).
Distribution.-Restricted to the type locality and the Dos Cabezos Mountains, Cochise County, Arizona.
Remarks.-The present form is accorded a subspecific designation on the

## Mittleman-New Lizard of the Genus Uta from Arizona. 167

basis of certain specimens from nearby localities in Cochise County, which exhibit characteristics that must be considered intermediate between chiricahuae and linearis. In the main, however, such specimens are few, and chiricahuae is essentially different from the linearis population of Cochise County, as well as from other points within the distribution of this latter, parental form.

The new subspecies exhibits certain mensural differences which are best illustated by various ratios. Thus, the type series shows an average head length-head width ratio of 81 percent, the range being from 75 percent to 96 percent, with three specimens having a ratio of 75 percent, twentysix specimens with ratios varying from 79 percent to 83.5 percent, and eight specimens with ratios between 84 percent and 96 percent. By comparison, a test sample of thirty-seven adult linearis of both sexes selected at random from a large series of specimens taken at Ramsey Canyon, Huachuca Mountains, Cochise County, Arizona, shows an average head length-head width ratio of 70.8 percent, the range being from 58.25 percent to 83 percent; only four specimens have ratios greater than 77.5 percent, while the great majority are in the quartile sector of the mean. Certain other ratios differ in linearis and chiricahuae, but none so markedly as this one. Test samples of linearis from Pima and Yavapai Counties, Arizona, as well as some from certain counties in New Mexico, agree well with the Ramsey Canyon sample in their morphological as well as mensural details, and exhibit about the same differences towards chiricahuae.

The uniform blue color of the gular region in chiricahuae is very rare in linearis, and is usually replaced by a medial blotch of yellow or orange; similarly, the relative uniformity of color in the interhumeral and interfemoral regions in chiricahuae is, in the great majority of linearis, replaced by a heavy stippling or mottling of dark gray or brown.

The subspecies linearis and chiricahuae are further differentiated by the nature of the enlarged dorsal scales; in the former race, these are usually smaller than the enlarged femoral and tibial scales, and only rarely equal them in size. In chiricahuae, the enlarged dorsals at least equal the femorals in size, and are consistently larger than the tibials. Further, the vertebral series of enlarged scales in linearis does not extend onto the basal portion of the tail for a distance equal to much more than one quarter the length of the femur; in chiricahuae, the distance is equal to at least half the length of the femur, of ten more.


[^0]:    ${ }_{1}$ Contribution No. 22, from the Department of Zoology, Ohio University, Athens, Ohio. 33-Proc. Biol. Soc. Wase., Vol. 54, 1941.

